



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,897	12/29/2003	Anthony Joonkyoo Yun	PALO-002	7432
24353 7590 03/12/2007 BOZICEVIC, FIELD & FRANCIS LLP 1900 UNIVERSITY AVENUE SUITE 200 EAST PALO ALTO, CA 94303			EXAMINER RAMACHANDRAN, UMAMAHESWARI	
			ART UNIT	PAPER NUMBER
			1617	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
31 DAYS		03/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/748,897	Applicant(s) YUN ET AL.	
	Examiner Umamaheswari Ramachandran	Art Unit 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-61 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-61 are pending.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-29, drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat neurodegenerative conditions, classified in class 514, subclass 651, class 514, subclass 903.
- II. Claims 1-28, 30 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a neuroinflammatory condition, classified in class 514, subclass 651, class 514, subclass 903, class 514, subclass 235.5.
- III. Claims 1-28, 31 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat an orthopedic inflammatory condition, classified in class 514, subclass 651, class 514, subclass 825.
- IV. Claims 1-28, 32 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a lymphoproliferative condition, classified in class 514, subclass 651, class 514, subclass 825.

- V. Claims 1-28, 33 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat an autoimmune condition, classified in class 514, subclass 651, class 514, subclass 885.
- VI. Claims 1-28, 34 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat an inflammatory condition, classified in class 514, subclass 651, class 514, subclass 886, class 514, subclass 914.
- VII. Claims 1-28, 35 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat an infectious disease, classified in class 514, subclass 651, class 424, subclass 234.1.
- VIII. Claims 1-28, 36 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a pulmonary condition, classified in class 514, subclass 651, in class 514, subclass 851.
- IX. Claims 1-28, 37 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a transplant related condition, classified in class 514, subclass 651.

Art Unit: 1617

- X. Claims 1-28, 38 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a gastrointestinal condition, classified in class 514, subclass 651, class 424, subclass 551.
- XI. Claims 1-28, 39 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat an endocrine condition, classified in class 514, subclass 651, class 424, subclass 562.
- XII. Claims 1-28, 40 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a skin condition, classified in class 514, subclass 651, class 514, subclass 828, class 514, subclass 886.
- XIII. Claims 1-28, 41 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat an aging associated condition, classified in class 514, subclass 651.
- XIV. Claims 1-28, 42 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a neurologic condition, classified in class 514, subclass 651, class 600, subclass 454, class 600, subclass 504.

- XV. Claims 1-28, 43 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a Th-2 dominant condition, classified in class 514, subclass 651.
- XVI. Claims 1-28, 44 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a condition wherein said condition is that causes at least one of hypoxia, hypercarbia, hypercapnia, acidosis and academia, classified in class 514, subclass 651.
- XVII. Claims 1-28, 45 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a condition listed in claim 45, classified in class 514, subclass 651.
- XVIII. Claims 1-28, 46 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a pediatric related condition, classified in class 514, subclass 651, class 424, subclass 422.
- XIX. Claims 1-28, 47 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat an OB-GYN condition, classified in class 514, subclass 651.

Art Unit: 1617

- XX. Claims 1-28, 48 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat a sudden death syndrome condition, classified in class 514, subclass 651.
- XXI. Claims 1-28, 49 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat fibrosis, classified in class 514, subclass 651, class 514, subclass 851.
- XXII. Claims 1-28, 50 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat post-operative recovery condition, classified in class 514, subclass 651.
- XXIII. Claims 1-28, 51 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat post-procedural recovery condition, classified in class 514, subclass 651.
- XXIV. Claims 1-28, 52 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat chronic pain, classified in class 514, subclass 651.
- XXV. Claims 1-28, 53 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an

effective amount of at least one beta-blocker to treat trauma, classified in class 514, subclass 651.

XXVI. Claims 1-28, 54 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat thermoregulation, classified in class 514, subclass 651.

XXVII. Claims 1-28, 55 drawn to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat vomiting syndrome, classified in class 514, subclass 651.

XXVIII. Claim 56 drawn to an algorithm for administering said at least one beta blocker to said subject in accordance with method of claim 1 recorded on a computer readable medium, classified in class 514, subclass 651.

XXIX. Claims 57-60 drawn to a system comprising an algorithm for administering said at least one beta blocker to said subject in accordance with method of claim 1 recorded on a computer readable medium, a pharmaceutical effective amount of at least one beta-blocker, and a delivery device classified in class 514, subclass 651.

XXX. Claim 61 drawn to a kit comprising a pharmaceutical effective amount of at least one beta-blocker, and instructions for practicing the method of claim 1, classified in class 514, subclass 651.

The inventions are distinct from each other because of the following reasons:

Art Unit: 1617

Inventions of Groups I - XXVII are related to a method of treating a subject for a condition caused by an autonomic nervous system abnormality administering an effective amount of at least one beta-blocker to treat various conditions as listed in groups I-XXVII. Group XXVIII is drawn to an algorithm for administering said at least one beta blocker, Group XXIX is drawn to a system comprising an algorithm for administering said at least one beta blocker to said subject in accordance with method of claim 1 recorded on a computer readable medium, a pharmaceutical effective amount of at least one beta-blocker, and a delivery device and Group XXX is drawn to a kit comprising a pharmaceutical effective amount of at least one beta-blocker, and instructions for practicing the method of claim 1. Groups I – XXVII drawn to a method of treating a variety of conditions and each condition is distinct and not closely related to each other. For example treating a skin condition is different than treating a neurologic condition. Groups XXVIII is drawn to an algorithm and Group XXIX to a system comprising an algorithm, a drug delivery device and a beta blocker and Group XXX is drawn towards the kit with the beta blocker. These groups are clearly distinct from the method groups listed above. A kit can contain any other drug other than a beta-blocker and instructions for treating a condition, a different algorithm can be used to administer a beta-blocker or the same algorithm can be used to administer a different drug. and the type of beta and non-beta blockers.

The searches of Groups I - XXVII may be overlapping but there is no reason to believe that the searches would be co-extensive. The search required for Group I to treat a neurodegenerative condition is not required for Group II to treat a

Art Unit: 1617

neuroinflammatory condition, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and the search required for each group is not required for other groups restriction for examination purposes as indicated is proper. The search for all inventions would place an undue burden on the Office in view of the corresponding diversity in the field of search for each group. Also, each condition, beta blocker and non-beta blocker fall under different class and sub class it would place an undue burden on the Office in view of the diversity in the field of search.

The application contains claims directed to patentably distinct species of the claimed invention. If Applicant elects a group from Group I – XXVII, XXIX applicant is required to elect a species of a beta-blocker and non-beta blocker. Furthermore, if groups I-XX, XXII, XXIII are elected Applicant is required to elect a species from the group of conditions. For example, if Applicant elects Group I, applicant is required to elect a species of a beta-blocker, a species of a non-beta blocker and a species from the neurodegenerative condition such as Alzheimer's disease (claim 29). If Applicant elects either Group XXVIII or Group XXX applicant is required to elect a species of a beta-blocker.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply

Art Unit: 1617

must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over

Art Unit: 1617

the prior art, the evidence or admission may be used in a rejection under 35 U.S.C 103(a) of the other invention.

Election

A telephone call to the attorney is not required where 1) the restriction requirement is complex, 2) the application is being prosecuted pro se, or 3) the examiner knows from past experience that a telephone election will not be made (MPEP § 812.01). Therefore, since the examiner knows from past experience that written restriction is preferred, a telephone election was not made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Umamaheswari Ramachandran whose telephone number is 571-272-9926. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SREENI PADMANABHAN
SUPERVISORY PATENT EXAMINER